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INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*			Application Number	09/432,503
			Filing Date	November 2, 1999
			First Named Inventor	Cech, Thomas R.
			Art Unit	1635
			Examiner Name	Jon E. Angell
Sheet	1	of 8	Attorney Docket Number	015389-002611US

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number — Number Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US 2004-0242529 A1	12-02-2004	Cech et al.	
	2	US 2004-0247613 A1	12-09-2004	Cech et al.	
	3	US 2005-0013825 A1	01-20-2005	Cech et al.	
	4	US 4,554,101	11-19-1985	Hopp	
	5	US 5,001,225	03-19-1991	Taylor	
	6	US 5,075,227	12-24-1991	Hagen	
	7	US 5,639,613	06-17-1997	Shay et al.	
	8	US 5,853,719	12-29-1998	Nair et al.	
	9	US 5,919,656	07-06-1999	Harrington et al.	
	10	US 6,306,388 B1	10-23-2001	Nair et al.	
	11	US 6,387,701 B1	05-14-2002	Nair et al.	
	12	US 6,545,133 B1	04-08-2003	Weinrich et al.	
	13	US 6,787,133 B2	09-07-2004	Weinrich et al.	
	14	US 7,262,174 B2	08-28-2007	Jiang et al.	
	15	US 7,262,288 B1	08-28-2007	Cech et al.	
	16	US 7,285,639 B2	10-23-2007	Cech et al.	
	17	US 60/038,750		Counter et al.	
	18	US 09/432,503		Cech et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document — Country Code[3] Number[4] Kind Code[5] (if known)			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	19	CA	2,194,393	A1	01-25-1996	Geron Corporation		
	20	EP	0 799 315	A2	10-08-1997	Cold Spring Harbor Lab.		
	21	EP	1 093 381	B1	08-20-2003	GemVax AS		
	22	WO	82/01461	A1	05-13-1982	Stanford University		
	23	WO	97/38013	A1	10-16-1997	Geron Corporation		
	24	WO	99/63945	A2	12-16-1999	Sloan-Kettering Institute		

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		Country Code[3]	Number[4]	Kind Code[5] (if known)				
	25	WO	00/02581	A1	01-20-2000	Norsk Hydro AS		☐
	26	WO	00/61766	A2	10-19-2000	Biomira, Inc.		☐
	27	WO	00/73420	A2	12-07-2000	Whitehead Inst. et al.		☐
	28	WO	01/60391	A1	08-23-2001	Regents of the Univ. of California		☐
	29	WO	02/094213	A2	11-28-2002	Dow Corning Toray Silicone Co., Ltd.		☐
	30	WO	03/038047	A2	05-08-2003	Baylor College of Medicine		☐

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	31	Adaptive definition, www.answers.com/topic/adaptive, 1 page (2007).	☐
	32	ALBERTS, B. et al., Molecular Biology of the Cell, Newton Press Ltd., p. 326, Fig. 7-43 (July 20, 1995).	☐
	33	ANDERSON, W., "Human gene therapy," Nature 392:25-30 (1998).	☐
	34	AYYOUB, M. et al., "Lack of tumor recognition by hTERT peptide 540-548-specific CD8^{+} T cells from melanoma patients reveals inefficient antigen processing," Eur. J. Immunol. 31:2642-51 (2001).	☐
	35	BEASLEY, E. et al., "Statistical refinement of primer design parameters," PCR Applications, Innis et al., Eds., Academic Press, San Diego, pp. 55-71 (1999).	☐

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	36	BELLONE, M. et al., "In vitro priming of cytotoxic T lymphocytes against poorly immunogenic epitopes by engineered antigen-presenting cells," *Eur. J. Immunol.* 24:2691-8 (1994).	☐
	37	BELLONE, M. et al., "Rejection of a nonimmunogenic melanoma by vaccination with natural melanoma peptides on engineered antigen-presenting cells," *J. Immunol.* 158:783-9 (1997).	☐
	38	BENEDICT, C. et al., "The long isoform of terminal deoxynucleotidyl transferase enters the nucleus and, rather than catalyzing nontemplated nucleotide addition, modulates the catalytic activity of the short isoform," *J. Exp. Med.* 193(1):89-99 (2001).	☐
	39	BOCZKOWSKI, D. et al., "Dendritic cells pulsed with RNA are potent antigen-presenting cells in vitro and in vivo," *J. Exp. Med.* 184:465-72 (1996).	☐
	40	BOWIE, J. et al., "Deciphering the message in protein sequences: tolerance to amino acid substitutions," *Science* 257:1306-10 (1990).	☐
	41	BURGESS, W. et al., "Possible dissociation of the heparin-binding and mitogenic activities of heparin-binding (acidic fibroblast) growth factor-1 from its receptor-binding activities by site-directed mutagenesis of a single lysine residue," *J. Cell Biol.* 111(5 Pt 1):2129-38 (1990).	☐
	42	FLOWER, D. "Towards in silico prediction of immunogenic epitopes," *Trends Immunol.* 24(12):667-74 (2003).	☐
	43	FROLKIS, M. et al., "Dendritic cells reconstituted with human telomerase gene induce potent cytotoxic T-cell response against different types of tumors," *Cancer Gene Ther.* 10:239-49 (2003).	☐
	44	GRAY, J. et al., "Cloning and expression of genes for the Oxytricha telomere-binding protein specific subunit interactions in the telomeric complex," *Cell* 67:807-14 (1991).	☐
	45	GREENBERG, R. et al., "Expression of mouse telomerase reverse transcriptase during development, differentiation, and proliferation," *Oncogene* 16:1723-30 (1998).	☐

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	46	GREENER, M., "Telomerase: The search for a universal cancer vaccine," *Mol. Med. Today 6*:257 (2000).	☐
	47	GREENSPAN, N. & Di CERA, E., "Defining epitopes: It's not as easy as it seems," *Nature Biotech. 7*:936-7 (1999).	☐
	48	GREIDER, C., "Telomerase and senescence: The history, experiment, the future," *Curr. Biol. 8*(5):R178-81 (1998).	☐
	49	GURA, T., "Antisense has growing pains," *Science 270*:575-7 (1995).	☐
	50	HARRINGTON, L. et al., "Gel shift and UV cross-linking analysis of *Tetrahymena* telomerase," *J. Biol. Chem. 270*(15):8893-901 (1995).	☐
	51	HEISER, A. et al., "Human dendritic cells transfected with renal tumor RNA stimulate polyclonal T-cell responses against antigens expressed by primary and metastatic tumors," *Cancer Res. 61*:3388-93 (2001).	☐
	52	HEISER, A. et al., "Induction of polyclonal prostate cancer-specific CTL using dendritic cells transfected with amplified tumor RNA," *J. Immunol. 166*:2953-60 (2001).	☐
	53	HERBERT, J. et al., The Dictionary of Immunology, 3rd Edition, Academic Press, London, pp. 58-59 (1985).	☐
	54	HERNÁNDEZ, J. et al., "Identification of a human telomerase reverse transcriptase peptide of low affinity for HLA A2.1 that induces cytotoxic T lymphocytes and mediates lysis of tumor cells," *Proc. Natl. Acad. Sci. USA 99*(19):12275-80 (2002).	☐
	55	HIRASHIMA, M. "Ecalectin/galectin-9, a novel eosinophil chemoattractant: Its function and production," *Int. Arch. Allergy Immunol. 122*(Suppl. 1):6-9 (2000).	☐

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	56	HOLMES, E., "PSMA specific antibodies and their diagnostic and therapeutic use," *Exp. Opin. Invest. Drugs* 10(3):511-9 (2001).	☐
	57	HUSTON, J. et al., "Protein engineering of antibody binding sites: Recovery of specific activity in an anti-digoxin single-chain Fv analogue produced in *Escherichia coli*," *Proc. Natl. Acad. Sci. USA* 85:5879-83 (1988).	☐
	58	JIANG, D. et al., "Smooth muscle tissues express a major dominant negative splice variant of the type 3 Ca2+ release channel (ryanodine receptor)," *J. Biol. Chem.* 278(7):4763-9 (2003).	☐
	59	JOHNSTONE, A. & THORPE, R., Immunochemistry in Practice, 2nd Ed., Blackwell Scientific Publications, Oxford, pp. 30, 49-50 (1987).	☐
	60	KIYONO et al., "Both Rb/p16INK4a inactivation and telomerase activity are required to immortalize human epithelial cells," *Nature* 396: 84-88 (Nov. 1998).	☐
	61	KRAMS, M. et al., "Regulation of telomerase activity by alternate splicing of human telomerase reverse transcriptase mRNA in a subset of neuroblastomas," *Am. J. Pathol.* 159(5):1925-32 (2001).	☐
	62	LANFRANCHI, G. et al., "Identification of 4370 expressed sequence tags from a 3'-end-specific cDNA library of human skeletal muscle by DNA sequencing and filter hybridization," *Genome Res.* 6:35-42 (1996).	☐
	63	LANGFORD, L. et al., "Telomerase activity in ordinary meningiomas predicts poor outcome," *Hum. Pathol.* 28(4):416-20 (1997).	☐
	64	LAZAR, E. et al., "Transforming growth factor alpha: mutation of aspartic acid 47 and leucine 48 results in different biological activities," *Mol. Cell. Biol.* 8:1247-52 (1988).	☐
	65	MALICKI, J. et al., "A human *HOX4B* regulatory element provides head-specific expression in *Drosophila* embryos," *Nature* 358:345-57 (July 23, 1992).	☐

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	66	MARTIN-RIVERA, L. et al., "Expression of mouse telomerase catalytic subunit in embryos and adult tissues," *Proc. Natl. Acad. Sci. USA* 95:10471-6 (September 1998).	☐
	67	Microbix Biosystems, Inc., AdMax™ adenovirus vector creation kits, 3 pages. http://www.microbix.com/products/PDFs/AdMaxVectorCreationKits.pdf	☐
	68	MINEV, B. et al., "Cytotoxic T cell immunity against telomerase reverse transcriptase in humans," *Proc. Natl. Acad. Sci. USA* 97(9):4796-801 (2000).	☐
	69	MORIN, G., "The implications of telomerase biochemistry for human disease," *Eur. J. Cancer* 33(5):750-60 (1997).	☐
	70	NAIR, D. et al., "Crystal structure of an antibody bound to an immunodominant peptide epitope: Novel features in peptide-antibody recognition," *J. Immunol.* 165(12):6949-55 (2000).	☐
	71	NAIR, S. et al., "Antigen-presenting cells pulsed with unfractionated tumor-derived peptides are potent tumor vaccines," *Eur. J. Immunol.* 27:589-97 (1997).	☐
	72	NAIR, S. et al., "Induction of cytotoxic t cell responses and tumor immunity against unrelated tumors using telomerase reverse transcriptase RNA transfected dendritic cells," *Nature Med.* 6(8):1011-7 (2000).	☐
	73	NGO et al., The Protein Folding Problem and Tertiary Structure Predictor, Mertz et al., Eds., pp. 433, 492-5 (1994).	☐
	74	O'HARE, M. et al., "Conditional immortalization of freshly isolated human mammary fibroblasts and endothelial cells," *Proc. Natl. Acad. Sci.* 98(2):646-651 (2001).	☐
	75	OHYASHIKI, J. et al., "Quantitative relationship between functionally active telomerase and major telomerase components (hTERT and hTR) in acute leukaemia cells," *Brit. J. Cancer* 92:1942-7 (2005)	☐

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	76	PARKER, K. et al., "Scheme for ranking potential HLA-A2 binding peptides based on independent binding of individual peptide side-chains," *J. Immunol. 152*(1):163-75 (1994). 1 page Abstract only	☐
	77	PING, L. et al., "Dramatic increase of telomerase activity during dendritic cell differentiation and maturation," *J. Leukoc. Biol. 74*:270-6 (2003).	☐
	78	*Protein Nucleic Acid and Enzyme 42*(9):1407-19 (July 1997). Japanese Language document	
	79	ROITT, I. et al., Immunology, 4th Edition, Mosby, London, pp. 7.7-7.8 (1996).	☐
	80	SAMBROOK, J. et al., Chapter 17, "Expression of Cloned Genes in Escherichia coli," Molecular Cloning, A Laboratory Manual, Cold Spring Harbor Press, Plainview NY (1989).	☐
	81	SKOLNICK, J. & FETROW, J., "From genes to protein structure and function: Novel applications of computational approaches in the genomic area," *Tibtech 18*:34-9 (2000).	☐
	82	Stratagene Catalog, p. 39 (1988).	☐
	83	SU, Z. et al., "Immunological and clinical responses in metastatic renal cancer patients vaccinated with tumor RNA-transfected dendritic cells," *Cancer Res. 63*:2127-33 (2003).	☐
	84	The Adjustment Foundation of Science and Technology Promotion News, Vol. 160 (1997-Jul-11) p. 0-6.	
	85	Tissue Culture, vol. 23[1] (1997-Jan) p.4-11 Japanese language document	

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	86	VONDERHEIDE, R. et al., "Vaccination of cancer patients against telomerase induces functional antitumor CD8+ T lymphocytes," *Clin. Cancer Res. 10*:828-39 (2004).	☐
	87	YI, X. et al., "Quantitation of telomerase components and hTERT mRNA splicing patterns in immortal human cells," *Nucl. Acids Res. 23*:4818-25 (2001).	
	88	YOSHIMI OKADA & JOUE IKEDA (Eds.), Japanese Molecular Biology Association edition, <u>Development of Molecular Biology 13</u>, "Expression of information and control in higher plant," Feb 10, 1990, Maruzen Corp. pp. 262-263.	

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